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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/082,274

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Carlos Alfonso Cruz

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7590

12/23/2003

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PATENT DEPARTMENT  
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EXAMINER

ASINOVSKY, OLGA

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
10/082,274	CRUZ ET AL.	
Examiner	Art Unit	
Olga Asinovsky	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10/23/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 9 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "chain branching units derived from at least one chain branching monomer having two or more reactive sites, said chain branching units being present in an amount not greater than 0.10 weight percent based on the total weight of the C8 to C30 alkyl (meth)acrylate monomer, wherein said chain branching units result in the polymeric composition having non-gelled polymer chains, and wherein said polymeric composition has a weight average molecular weight of at least 100,000 g/mol, does not reasonably provide enablement for non-gelled polymer chains having any molecular weight. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. In particular, in the present specification at page 3, lines 10-12, the inventor discloses non-gelled polymer chains having a weight average molecular weight of at least 100,000 g/mol. Non-gelled polymer chain has specified weight average molecular weight, at page 4, lines 4-6 and 18-19. However, there is not clear a definition for "non-gelled polymer chains." In the present specification at page 6, line 31 through page 7, line 2, the inventor discloses that "in ensuring that non-gelled polymer chains are present, the molecular weight (of

the polymeric composition) will typically be less than 3,000,000 g/mol, more typically less than 2,000,000 g/mol, and even more typically less than 1,500,000 g/mol." Also, inventor discloses that a practical upper limit for the molecular weight of the polymeric composition is when all of the polymer chains are crosslinked, page 6, line 30. In the working Example 1 at pages 22-23, the inventor discloses that a high molecular weight high-alkyl (meth)acrylate polymer composition based on lauryl methacrylate and of ALMA (allyl methacrylate=chain branching unit) was obtained in the first-stage wherein the first-stage polymer particle has molecular weight greater than 100,000 g/mol, wherein a high-alkyl methacrylate and a functional monomer having two reactive sites are polymerizing together. In light of the relative lack of direction provided by the inventor for using any molecular weight of non-gelled polymer chains it is concluded that it would have required undue experimentation for one of ordinary skill in the art to practice the claimed invention. *In re wands*, 858 F.2d at 737, 8 USPQ 2d 1400, 1404 (Fed Cir. 1988).

3. Claims 1 and 9 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling. "Non-gelled polymer chains having a weight average molecular weight of at least 100,000 g/mol" in the present specification at page 3, lines 11-12, 21-22, page 4, lines 18-19 is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). There is no molecular weight for "non-gelled polymer chains." Chain branched units derived from at least one chain branching

monomer having two or more reactive sites does not properly introduce a non-gelled characteristic for "non-gelled polymer chains." "Non-gelled polymer chain" is considered essential by the applicant, but is not reflected in the amended claims. Moreover, in the currently amended claims 1 and 9 a weight average molecular weight of at least 100,000 g/mol is referring to a polymeric composition.

4. Claims 1 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. There is no definition for "non-gelled polymer chain." "Non-gelled polymer chain" is indefinite.

Also, applicants do not properly express the benefit for using "non-gelled polymer chains." Because there is no average molecular weight of said "non-gelled polymer chain."

There is confusion in the present specification. At page 3, lines 11-12, non-gelled polymer chains have a weight average molecular weight of at least 100,000 g/mol, whereas at page 23, line 23 a polymer particle (of the polymer composition) in the first-stage has a molecular weight of greater than 100,000 g/mol. There is no characteristic for "non-gelled polymer chain."

The rejections of claims 1-10 under 35 U.S.C. 103(a) as being unpatentable over Carty et al '4,086,296 or Brady et al '6,031,047 are withdrawn in light of the amendment of 10/23/03.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art is relevant to show the state of the art knowledge.

8.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 703-308-0041. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone number

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for the organization where this application or proceeding is assigned is 703-872-9310 and 703-872-9311 after final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

C.A.

O.A.

December 1, 2003

Olga Asinovsky  
Examiner  
Art Unit 1711

